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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/717,136	11/22/2000	Thomas L. Mydlack	174-927	2863
23517	7590	04/08/2004	EXAMINER	
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP			LEE, EDMUND H	
3000 K STREET, NW			ART UNIT	
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WASHINGTON, DC 20007			1732	

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/717,136

Applicant(s)

MYDLACK ET AL.

Examiner

EDMUND H. LEE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,3,4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hwang (USPN 5952415). Hwang teaches the claimed process as evident at col 1, lns 62-65; col 3, lns 20-44; col 4, lns 56-57; and col 5, ln 46-col 6, ln 3.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang (USPN 5952415). The above teachings of Hwang are incorporated hereinafter. Hwang does not teach cooling at the claimed temperatures; cooling for the claimed duration; achieving the specific amount of volumetric reduction; casting the cover layer; and reaction injection molding the cover layer. In regard to cooling at the claimed temperatures, cooling temperature is well-known in the molding art as an important molding parameter and the desired temperature would have been obviously and readily determined through routine experimentation by one having ordinary skill in the art at the time the invention was made. Further, the claimed temperatures are generally well-

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known in the molding art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to cool the golf ball subassembly of Hwang at the claimed cooling temperatures in order to achieve shrinkage. In regard to cooling for the claimed duration, cooling duration is well-known in the molding art as an important molding parameter and the desired duration would have been obviously and readily determined through routine experimentation by one having ordinary skill in the art at the time the invention was made. Further, the claimed durations are generally well-known in the molding art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to cool the golf ball subassembly of Hwang for the claimed duration in order to ensure the desired amount of shrinkage. In regard to achieving the specific amount of volumetric reduction, volume reduction is well-known in the molding art as an important molding parameter and the desired reduction amount would have been obviously and readily determined through routine experimentation by one having ordinary skill in the art at the time the invention was made. Further, the claimed volume reduction is generally well-known in the molding art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to reduce the golf ball subassembly of Hwang by the claimed amount in order to produce a subassembly having a desired play characteristic. In regard to casting the cover layer, such is well-known in the golf ball molding art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to cast the cover layer of Hwang in order to produce a thin cover layer. In regard to reaction injection molding the cover layer, such is well-known in the golf ball molding art. Thus, it would have been obvious

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to one of ordinary skill in the art at the time the invention was made to reaction injection mold the cover layer of Hwang in order to produce a durable, high performance cover layer.

5. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang (USPN 5958415) as applied to claim 1 above, and further in view of Brown et al (USPN 5006297). The above teachings of Hwang are incorporated hereinafter. Hwang does not teach applying the cover by steps of claim 14; curing the cover material to form the cover layer after the step of mating the second mold half; and the steps of curing of claim 16. Brown et al teach a method of casting a golf ball cover (figs 1-2); providing a first mold half and second old half, the first and second mold halves have cavities therein (figs 1-2); heating the mold halves to a predetermined temperature (col 5, lns 22-26; col 6, lns 56-58; col 7, lns 1-7 and 20-25; figs 1-2); adding a cover material to the first mold half cavity (col 5, lns 22-26; col 6, lns 56-58; col 7, lns 1-7 and 20-25; figs 1-2); allowing the cover material to gel (col 5, lns 22-26; col 6, lns 56-58; col 7, lns 1-7 and 20-25; figs 1-2); inserting a golf ball subassembly into the first mold half cavity (col 5, lns 22-26; col 6, lns 56-58; col 7, lns 1-7 and 20-25; figs 1-2); adding the cover material to the second mold half cavity (col 5, lns 22-26; col 6, lns 56-58; col 7, lns 1-7 and 20-25; figs 1-2); mating the second mold half with the first mold half so that the cover material and the golf ball subassembly are contained within the cavities in the mold halves (col 5, lns 22-26; col 6, lns 56-58; col 7, lns 1-7 and 20-25; figs 1-2); and curing the cover material to form the cover layer after the step of mating the second mold half (col 5, lns 22-26; col 6, lns 56-58; col 7, lns 1-7 and 20-25; figs 1-2). Brown et al also teach

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heating the mold halves to cure the cover material (col 5, lns 22-26; col 6, lns 56-58; col 7, lns 1-7 and 20-25; figs 1-2). This step of heating the mold halves constitutes the claimed steps of maintaining the mold halves at a first temperature for a first predetermined time, heating the mold halves to a second temperature greater the first predetermined temperature for a second predetermined time, and maintaining the mold halves at a third temperature for a third predetermined time. As the temperature of the mold halves increases from being heated, it is inherent that the temperature of the mold halves are maintained, even for the slightest amount of time, at numerous temperatures. Hwang and Brown et al are combinable because they are analogous with respect to molding golf balls. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above teachings of Brown et al into the process of Hwang in order to efficiently mold a high quality golf ball cover.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 17, 18, 19, 22, 23 and 26 rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al (USPN 5006297) as set forth in the Office action mailed 10/14/03.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 20, 21, 24, 25 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al (USPN 5006297) as set forth in the Office action mailed 10/14/03.

10. Claims 31-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang (USPN 5952415) in view of Brown et al (USPN 5006297) as set forth in the Office action mailed 10/14/03.

11. Applicant's arguments filed 1/12/04 have been fully considered but they are not persuasive. In regard to Hwang, applicant argues that "Hwang only discloses cooling the subassembly during its formation, Hwang does not disclose, or even suggest, that a formed golf ball subassembly be cooled such that it undergoes a volumetric reduction and a cover layer be applied thereon." At col 3, lns 10-37, Hwang clearly teach molding a core with a mold thereby forming a molding that is then volumetrically reduced by cooling. The use of the term "molding" is indicative of a formed article. The cooling step produces a high energy core.

In regard to Brown, applicant argues that there is no step of maintaining the mold halves at a third temperature for a third predetermined time; and maintaining the mold parts at any intermediate temperature for any predetermined time. For both points of argument, Brown clearly teaches the curing of a cover material within a compression mold wherein the temperature of the smooth pin mold can be between ambient and

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140F and the compression mold can be 195F or 235F (col 7, Ins 1-25; col 8, Ins 47-61).

The step of heating either mold from ambient temperature to its holding temperature inherently teaches raising the temperature of the mold through a set of temperatures at a specific heating rate. Since rate is known as a unit per time, it should be understood that a step of heating a mold teaches holding/maintaining a mold at a number of temperatures for a predetermined time until the final holding temperature is reached. It should also be mentioned that the molds of Brown are initially at ambient before being held/maintained at its molding temperature. The initial ambient temperature constitutes the claimed step of maintaining the mold halves at a first temperature for a predetermined time; whereas the molding temperature constitutes the step of maintaining the mold halves at a third temperature for a third predetermined time.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nesbitt (USPN 3671477) teaches shrinking a golf ball subassembly. Gendreau et al (USPN 4692497) teach forming a golf ball by curing the molding material in a stepwise manner. Yamada (USPN 4570937) teaches forming a golf ball by curing a core in a stepwise manner.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 703.305.4019. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 703.305.5493. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

EDMUND H. LEE
Primary Examiner
Art Unit 1732


4/5/04

EHL